

## PATENT ABSTRACTS OF JAPAN

(11) Publication number : 62-066958  
 (43) Date of publication of application : 26.03.1987

(51) Int. Cl.

B41J 3/21  
 G03G 15/04  
 H01L 33/00  
 H05K 7/20

(21) Application number : 60-207341  
 (22) Date of filing : 19.09.1985

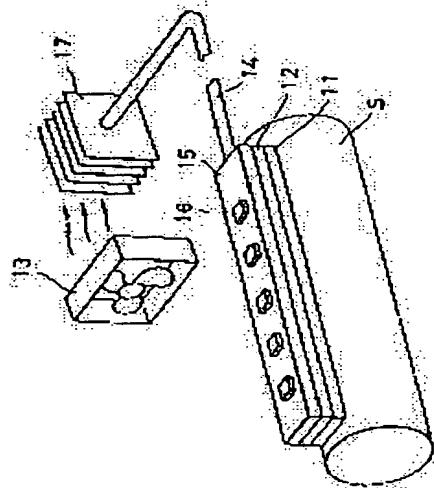
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 KAWAHARA SATOSHI

## (54) PRINTER

## (57) Abstract:

PURPOSE: To provide a small-sized low cost LED printer generating no irregularity of image density, by arranging a plurality of electronic cooling elements (Peltier element) at predetermined intervals in order to control a LED array so that environmental temp. becomes uniform over the whole of said LED array.

CONSTITUTION: The exposure part of this LED printer is constituted of a LED array consisting of LEDs each formed by arranging the predetermined number of printing heads for exposing a photosensitive drum S on a LED substrate 11 in a row, the heat pipe 14 fixed by a support plate 12 so as to be adhered to the back surface of the LED substrate 11 and extending to the position of a fan 13 for cooling a machine interior, five Peltier elements 16 arranged on a heat conductive substrate 15 adhered to the back surface of the support plate 12 at equal intervals and heat dissipating fins 17 arranged so as to be opposed to the fan 13 for cooling the machine interior at the leading end of the heat pipe.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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PN - JP62066958 A 19870326  
PD - 1987-03-26  
PR - JP19850207341 19850919  
OPD - 1985-09-19  
TI - PRINTER  
IN - WATABE SUSUMU;KAWAHARA SATOSHI  
PA - FUJI XEROX CO LTD  
EC - B41J2/45  
IC - B41J3/21 ; G03G15/04 ; H01L33/00 ; H05K7/20  
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TI - Printer using LED - has Peltier effect elements to relax temperature difference at LED array NoAbstract Dwg 2/2  
PR - JP19850207341 19850919  
PN - JP62066958 A 19870326 DW198718 004pp  
PA - (XERF ) FUJI XEROX CO LTD  
IC - B41J3/21 ;G03G15/04 ;H01L33/00 ;H05K7/20  
OPD - 1985-09-19  
AN - 1987-125499 [18]

PN - JP62066958 A 19870326  
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AP - JP19850207341 19850919  
IN - WATABE SUSUMU; others:01  
PA - FUJI XEROX CO LTD  
TI - PRINTER  
AB - PURPOSE:To provide a small-sized low cost LED printer generating no irregularity of image density, by arranging a plurality of electronic cooling elements (Peltier element) at predetermined intervals in order to control a LED array so that environmental temp. becomes uniform over the whole of said LED array.  
- CONSTITUTION:The exposure part of this LED printer is constituted of a LED array consisting of LEDs each formed by arranging the predetermined number of printing heads for exposing a photosensitive drum S on a LED substrate 11 in a low, the heat pipe 14 fixed by a support plate 12 so as to be adhered to the back surface of the LED substrate 11 and extending to the position of a fan 13 for cooling a machine interior, five Peltier elements 16

none

none

none

arranged on a heat conductive substrate 15 adhered to the back surface of the support plate 12 at equal intervals and heat dissipating fins 17 arranged so as to be opposed to the fan 13 for cooling the machine interior at the leading end of the heat pipe.

| - B41J3/21 ;G03G15/04 ;H01L33/00 ;H05K7/20

none

none

none

